No.



200500211

THE UNITED SHATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Syngenta Seeds, Inc.

MICERIA, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC PLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR INGIT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE URPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE R USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROFESSIONAL PROPAGATION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN, FIELD

'Floyd'

In Testimony Wherevi, I have hereunto set my hand and caused the seal of the Plant Unrichy Frotection Office to be affixed at the City of Washington, D.C. this nineteenth day of September, in the year two thousand and five.

Alleste

YLM'S Commissioner

Plant Variety Protection Office Agricultural Marketing Service Secretary of Agriculture

REPRODUCE LOCALLY. Include form number and da	te on all reproduc	ctions	Form Approved - OMB No. 0581-0055					
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE			The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.					
APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse)			Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).					
1. NAME OF OWNER			TEMPORARY DESIGNATION OR EXPERIMENTAL NAME	3. VARIETY NAME				
Syngenta Seeds, Inc.			ROG312R	Floyd				
4. ADDRESS (Street and No., or R.F.D. No., City,	State, and ZIP Coo	le, and Country)	5. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY				
600 N. Armstrong Place Boise, ID 83704			208-322-7272	PVPO NUMBER 200500211				
			6. FAX (include area code)					
			208-327-9319	FILING DATE				
7. IF THE OWNER NAMED IS NOT A "PERSON", ORGANIZATION (corporation, partnership, associ		8. IF INCORPORATED, GIVE STATE OF INCORPORATION	9. DATE OF INCORPORATION	1 115 - 1				
Corporation		DE	February 25, 1975	April 15, 2005				
10. NAME AND ADDRESS OF OWNER REPRESE Charleen Orthel	NTATIVE(S) TO S	ERVE IN THIS APPLICATION. <i>(First p</i>	erson listed will receive all papers)	\$ 3652.00				
Syngenta Seeds, Inc Vegetab	les		7	R DATE 4/15/2005				
600 N. Armstrong Place				CERTIFICATION FEE:				
P.O. Box 4188				\$ 682.00				
Boise, ID 83704				B DATE B/12/2005				
11. TELEPHONE (Include area code)	12. FAX (Include	e area code)	13. E-MAIL					
208-327-7246	208-32	27-9319	charleen.orthel@	charleen.orthel@syngenta.com				
14. CROP KIND (Common Name)	16. FAMILY NA			18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL)				
Dry Edible Bean	Legun	ninosae	☐ YES 🖾 NO					
15. GENUS AND SPECIES NAME OF CROP		IETY A FIRST GENERATION HYBRI		ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE DEREGULATE THE GENETICALLY MODIFIED PLANT FOR				
Phaseolus vulgaris	☐ YES	_	COMMERICALIZATION.					
 CHECK APPROPRIATE BOX FOR EACH ATTA (Follow instructions on reverse) 	CHMENT SUBMIT	TED	20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS. OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)					
a. 🛛 Exhibit A. Origin and Breeding History	of the Variety	•	· ·	☐ YES (if "yes", answer items 21 and 22 below) ☑ NO (if "no", go to item 23)				
b. 🛛 Exhibit B. Statement of Distinctness				21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?				
c. 🛛 Exhibit C. Objective Description of Vari	ety		YES NO					
d. 🛛 Exhibit D. Additional Description of the	Variety (Optional)		IF YES, WHICH CLASSES?	IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED				
e. 🛛 Exhibit E. Statement of the Basis of the	Owner's Ownersh	nip	22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?					
f. Voucher Sample (2,500 viable untreate verification that tissue culture will be de			☐ YES ☐ NO					
repository)			IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.					
g. Siling and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)			NA FOUNDATION NA REGISTERED NA CERTIFIED					
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED			(If additional explanation is necessary, please use the space indicated on the reverse.) 24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY					
FROM THIS VARIETY BEEN SOLD, DISPOSED OTHER COUNTRIES?			24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?					
☑ YES ☐ NO			☐ YES ☒ NO					
IF YES, YOU MUST PROVIDE THE DATE OF I FOR EACH COUNTRY AND THE CIRCUMSTA	RST SALE, DISP NCES. (Please us	OSITION, TRANSFER, OR USE e space indicated on reverse.)	IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)					
25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.								
The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.								
Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.								
SIGNATURE OF OWNER () () A () () A () ()			IGNATURE OF OWNER					
NAME (Please print or type) N			NAME (Flease print or type)					
Charleen Orthel								
			CAPACITY OR TITLE	DATE				
Registration Specialist 14 apr. 2005								

200500211

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filling fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 http://www.ams.usda.gov/lsg/seed.htm.

ITEM

- 19a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

det_deliv_date mat_material_desc	del_qty_lb	shp_country	shp_state	Purpose
30-Mar-05 DRYB PINK FLOYD	48000	US	ND	Commercial Sale,

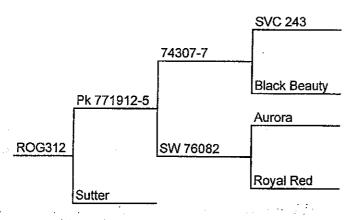
Dry Edible Pink Bean

'ROG312R'

Exhibit A

Origin and Breeding History

The objective in the development of Syngenta Seeds, Inc. `ROG312R' in the pink market class of dry edible beans was to transfer the Ur11 rust gene from the donor parent `BelMiNeb-RMR-3' into Syngenta Seeds, Inc. variety `ROG312' using the backcrossing breeding method. `ROG312R' was derived from a series of five backcrosses with `ROG312' as the recurrent parent.



Details of the selection and multiplication are as follows:

Year	Gen.	Season	Plot	No. SPS	Lbs.	Criteria
2000	BC5F1	Winter	00-GH9203-3			Bulk
2000	BC5F2	Summer	00-DB0303	3		SPS's based on pod load, plant architecture, maturity, and seed quality
2000	BC5F3	Fall/Winter	00-GH0303-1			Generation advance & seed increase
2001	BC5F4	Winter/Spring	01-GH0303-1			Generation advance & seed increase
2001	BC5F5	Summer	01-TFRPK03	10	19.3	Yield test & increase
2002	BC5F6	Summer	02-QD2711		754	Seed stock increase

ROG312R has been observed to be uniform and stable since the BC5F3 generation and has remained uniform and stable through the BC5F6. Stock 02-QD2711 is being increased to commercial size quanities. Seed stock will be monitored for purity. No variants have been observed since the BC5F3 generation.

Dry Edible Pink Bean

'ROG312R'

Exhibit B

Novelty Statement

Syngenta Seeds, Inc. variety 'ROG312R' is most like the variety 'ROG312', but differs in the following way:

'ROG312R' has the Url1 rust gene from the donor parent 'BelMiNeb-RMR-3', 'ROG312' does not. This gene gives 'ROG312R' resistance to all known strains of bean rust, except race 108, whereas 'ROG312' does not have the Url1 rust gene.

The following chart shows the differences between 'ROG312R' and 'Viva':

Units	ROG312R	Viva	Probability	Sample size
			•	
days	84	88	NS	. 1
days	44	46	NS	· 1
cm.	75.8	64.7	0.0001	20
mm.	96.1	103.3	0.0000	20
mm.	8.52	8.29	0.3764	20
mm.	9.5	9.18	0.0578	20
mm.	12.37	12.42	0.7726	20
no.	5.5	5.3	0.2064	20
in.	31.95	29.18	0.1952	19
no.	1,348	1,665	NS	1
	days days cm. mm. mm. mm. no.	days 84 days 44 cm. 75.8 mm. 96.1 mm. 8.52 mm. 9.5 mm. 12.37 no. 5.5 in. 31.95	days 84 88 days 44 46 cm. 75.8 64.7 mm. 96.1 103.3 mm. 8.52 8.29 mm. 9.5 9.18 mm. 12.37 12.42 no. 5.5 5.3 in. 31.95 29.18	days 84 88 NS days 44 46 NS cm. 75.8 64.7 0.0001 mm. 96.1 103.3 0.0000 mm. 8.52 8.29 0.3764 mm. 9.5 9.18 0.0578 mm. 12.37 12.42 0.7726 no. 5.5 5.3 0.2064 in. 31.95 29.18 0.1952

- ROG312R is taller than Viva (75.8 vs. 64.7 cm).
- ROG312R has a shorter pod than Viva (96.1 vs. 103.3 mm).
- ROG312R has the Ur11 gene for bean rust resistance wheras Viva has no rust resistance.

Data file: PVP_312R
Title: PVP ROG312R vs. VIVA 2002

200500211

Function: T-TEST

SAMPLE ONE: ROG312R SAMPLE TWO: VIVA

Variable 1 : Plant Height(cm) Variable 1 : Plant Height(cm)

Cases 1 through 20 Cases 21 through 40

Mean:75.75Mean:64.70Variance:66.72Variance:53.48Standard Deviation:8.17Standard Deviation:7.31

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value: 1.2475

Numerator degrees of freedom: 19 Denominator degrees of freedom: 19

Probability: 0.6346

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:

Variance of the difference between the means:

Standard Deviation of the difference:

t Value:

Degrees of freedom:

Probability of t:

60.1039

6.0104

2.4516

4.5072

Result: Significant t - Reject the Hypothesis
Confidence limits for the difference of the means (for alpha=0.05):
11.050 plus or minus 4.963 (6.087 through 16.013)

Data file: PVP_312R

Title: PVP ROG312R vs. VIVA 2002

200500211

Function: T-TEST

SAMPLE ONE: ROG312R

SAMPLE TWO: VIVA

Variable 2 : Pod Length(mm) Variable 2 : Pod Length(mm)

Cases 1 through 20 Cases 21 through 40

Mean:96.06Mean:103.31Variance:13.18Variance:20.52Standard Deviation:3.63Standard Deviation:4.53

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value: 1.5570

Numerator degrees of freedom: 19 Denominator degrees of freedom: 19

Probability: 0.3429

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared:

Variance of the difference between the means:

Standard Deviation of the difference:

t Value:

Degrees of freedom:

Probability of t:

16.847

1.2980

-5.5857

38

0.0000

Result: Significant t - Reject the Hypothesis
Confidence limits for the difference of the means (for alpha=0.05):
7.250 plus or minus 2.628 (4.622 through 9.878)

Data file: ROG312R

Title: ROG31R vs Viva

Function: T-TEST

SAMPLE ONE:

SAMPLE TWO:

Variable 1 : Vine Length Variable 1 : Vine Length

Cases 1 through 19 Cases 21 through 39

 Mean:
 31.95
 Mean:
 29.18

 Variance:
 57.36
 Variance:
 25.92

Standard Deviation: 7.57 Standard Deviation: 5.09

F-TEST FOR THE HYPOTHESIS "VARIANCE 1 = VARIANCE 2"

F Value: 2.2127

Numerator degrees of freedom: 18 Denominator degrees of freedom: 18

Probability: 0.1009

Result: Non-Significant F - Accept the Hypothesis

T-TEST FOR THE HYPOTHESIS "MEAN 1 = MEAN 2"

Pooled s squared: 41.6404
Variance of the difference between the means: 4.3832
Standard Deviation of the difference: 2.0936
t Value: 1.3198
Degrees of freedom: 36
Probability of t: 0.1952

Result: Non-Significant t - Accept the Hypothesis Confidence limits for the difference of the means (for alpha=0.05):

2.763 plus or minus 4.246 (-1.483 through 7.009)

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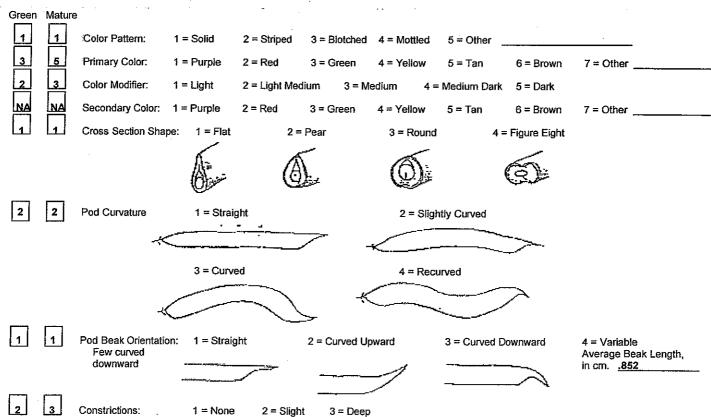
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY Field Bean (Phaseolus vulgaris L.)

	i icia beali (i haseolas valgaris i	/
Syngenta Seeds, Inc.	TEMPORARY OR EXPERIMENTAL DESIGNATION ROG312R	'Floyd'
ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country) 600 N. Armstrong Place Boise, ID 83704		PVPO NUMBER 2005 0 0 2 1 1
PLEASE READ ALL INSTRUCTIONS CAREFULLY:	:	
Provide data for all characters unless indicated as "optic Measured data should be the mean of an appropriate nu may be used to determine plant color. Designate the co	umber of well spaced (15-20 cm) plants. The Royal	or numerical values that best describe this variety. Horticultural Society or any recognized color standard
COLOR SYSTEM USED:	LOCATION OF THE TEST(S) Southern Idaho: Twin Fa) TO EVALUATE THIS VARIETY: Ilis
1. MARKET CLASS:	2 = MATURITY:	
7	8 4 Days from Pla Heat Uni Base Te	anting to Harvest Maturity its from Planting to Harvest Maturity (Optional). Specify imperature Used: anting to Harvest Maturity of Check Variety (Use Check of Market Class Shown in Item 1)
3. PLANT HABIT:		
TYPE 1 = Ia Bush-determinate, Strong and Erect Stem a 2 = Ib Bush-determinate, Weak Stem and Branche 3 = Ila Erect Growth Habit-indeterminate, Guides or not developed 4 = Ilb Erect Growth Habit-indeterminate, Guides with no Ability to Climb 5 = Illa Vine-indeterminate, Short Guides with no 6 = Illb Vine-indeterminate, Long Guides with Abil 7 = IVa Indeterminate Climbing, Pods Distributed Plant 8 = IVb Indeterminate Climbing, Pods Concentrate Part of the Plant	and Branches es (Runners) short Medium to Long, ability to Climb Introughout the	ht of Mature Plant, in cm. ht of Check Variety, in cm. e Check as Above) Low (Lower Pods Touching Soil Surface) High (Lower Pods not Touching Soil Surface) Scattered (Not Concentrated High or Low) chine Harvest: 1 = Adapted 2 = Not Adapted e: 1 = Good 2 = Fair 3 = Poor

Exhibit C (Dry Edible Bean) 4. LEAFLET MORPHOLOGY: (Use terminal Leaflet of a Fully Expanded Trifoliolate) 1 = Smooth 2 = Wrinkled 1 = Dull 2 = Glossy 3 = Semiglossy 4 = Variable Semi 1 = Ovate Shape: 2 = Lanceolate 3 = Deltoid 4 = Cordate 5 = Rhomboid 1 Apex 1 = Acute 2 = Acuminate 4 = Obtuse 3 = Cuspidate of Leaflet: 2 Base of 1 = Obtuse 2 = Oblique 3 = Cordate 4 = Cuneate 5 = Attentuate Leaflet: 5. FLOWER COLOR AND DAYS TO BLOOM: Color of Standard: 2 = Cream 1 = White 3 = PinkColor of Keel: 1 = White 2 = Cream 3 = Pink4 = Blue 5 = Purple 4 = Blue 5 = Purple Color of Wings: 1 = White 2 = Cream 3 = PinkDays to 50% Bloom 4 = Blue 5 = Purple 6. POD MORPHOLOGY: (Green Pod Morphology Optional) Green Mature



Average Number of Seeds per Pod

7. SEED COLOR:		200500211
3 1 = Shiny 2 = Dull 3 = Semishiny	4 = Variable 1 = Monochro	
5 = Brown 6 = Pink	3 = Buff 4 = Tan	1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple 9 = Blue 10 = Black 11 = Other
Color Pattern: 1 = Solid 2 = Splashed 3 = M 4 = Striped 5 = Flecked 6 = D	lottled 1 Hilar Ring: ofted	1 = Absent 2 = Present
0 0 Hilar Ring Color: 1 = White 2 = Y 8 = Purple 9 = B	eilow 3 = Buff 4 = Tan 5 = Brov lue 10 = Black 11 = Other	
8. SEED SHAPE AND WEIGHT:	***	*
3 Shape of Seed Taken 1 = Round ; From Middle of Pod:	2 = Oval 3 = Cuboid 4 = Kidn	ey 5 = Truncate Fastigate
	0 G S	
3 4 Dry Seed Weight in g/100g Seeds (Adjusted to	12% Moisture)	
9. ANTHOCYANIN PIGMENTATION:		
1 = Absent	Stems 1 Pods	2 Seeds
	Petioles 1 Peduncles	1 Nodes
10. KNOWN DISEASE REACTION:		
DISEASES - COMMON NAME: Anthracnose, Rust, Pov White Mold, angular Leaf Spot, Bacterial Wilt, Halo Blight Virus, Bean Yellow Mosaic Virus, Curly Top Virus, Bacter Reaction: 1 = Susceptible 2 = Resistant (Give the Common Name (CN), Scientific Name (SN	, Fuscous Blight, Common Bacterial Blight, Redial Brown Spot, Bean Southern Mosaic Virus, Ot 3 = Tolerant 4 = Avoidance I), and Race(s), Where Applicable)	Node Virus, Pod Mottle Virus, Bean Common Mosaic her (Specify)
1 Disease: CN Bean Common Mosaic Virus		
2 Disease: CN Bean Rust NA Disease: CN		
NA Disease: CN		•
NA Disease: CN		
11. KNOWN INSECT/NEMATODE RESISTANCE:		
PESTS - COMMON NAME: Aphids, Bean Pod Weevil, Beetle, Root Know Nematode, Corn Seed Maggot, Spider Reaction: 1 = Susceptible 2 = Resistant (Give the Common Name (CN), Scientific Name (SN)	Mites, Thrips, Weevils, Western Bean Cutowrm, 3 = Tolerant 4 = Avoidance	Hopper, Lesion Nematode, Lygus, Mexican Bean , Other (Specify)
NA Pest: CN	: SN	; Race(s);
NA Pest: CN	; SN;	Race(s);
NA Pest: CN	; SN;	Race(s):
12. KNOWN PHYSIOLOGICAL STRESS REACTION:	-	
1 = Susceptible 2 = Resistant NA Heat	NA Cold NA Drought NA	Air Dellusion
3 = Tolerant 4 = Avoidance	NA Cold NA Drought NA	Air Pollution

ST-470-61 (04-03) designed by the Plant Variety Protection Office using Microsoft Word 2000.

13. COMMENTS:

200500211

Dry Edible Pink Bean

'ROG312R'

Exhibit D

Botanical Description

Dry edible pink bean 'ROG312R' is a early season variety that matures in 84 days in Idaho. It has a medium vine plant habit(type IIIa, CIAT classification) and flowers in 44 days. It has good branching and pod set is scattered up the plant.

The leaves are semi-wrinkled, dull, ovate with acuminate apices, and mostly obtuse leaf bases. Flowers are white, and pods are green which turn tan at maturity. The seeds are cuboid in shape, pink in color and average 34 g per 100 seeds. ROG312R has pods averaging 96 mm in length and 5.5 seeds per pod.

ROG312R is susceptible to all Bean Common Mosaic Virus strains. ROG312R is resistant to all races of Bean Rust except race 108.

ROG312R is adapted to the growing areas of Idaho, North Dakota and Manitoba, Canada.

REPRODUCE LOCALLY, Include form number and		reproduction	ns. FO	RM APPROVED - OMB N	lo. 0581-0055
U.S. DEPARTMENT OF AGRICULT AGRICULTURAL MARKETING SER		certificat	on is required in order to dete e is to be issued (7 U.S.C. 24; tial until the certificate is issue	21). The information is hel	tection d
STATEMENT OF THE BASIS OF OV	WNERSHIP			-, -,-,-,,	
1. NAME OF APPLICANT(S)			ORARY DESIGNATION (PERIMENTAL NUMBER	3. VARIETY NAME	
Syngenta Seeds, Inc.		ROG	312R	Floyd	
 ADDRESS (Street and No., or R.F.D. No., City, State, and a 600 N. Armstrong Place 	ZIP, and Country)	5. TELEI	PHONE (Include area code)	6. FAX (Include area code)	
Boise, ID 83704		208	-322-7272	208-327-9319	
		7. PVPO	NUMBER		
			2005	00211	
8. Does the applicant own all rights to the variety?	Mark an "X" in the	e appropria	le block. If no, please explai r	n. 🛛 YES	□ NO
		- -			<u> (</u>
9. Is the applicant (individual or company) a U.S.	national or a U.S. b	ased comp	any? If no, give name of cou	untry. 🛛 YES	□ №
10. Is the applicant the original owner?	YES	□ NO	If no, please answer-one o	of the following:	
If the original rights to variety were owned to	by individual(s), is (are) the orig	ginal owner(s) a U.S. National If no, give name of country		
b. If the original rights to variety were owned	by a company(ies), ☑ YES	is (are) the	onginal owner(s) a U.S. base If no, give name of country		5 -
11. Additional explanation on ownership (Trace ow The dry edible small red bean ROG312F agreement between the employee and Sy employee while employed by Syngenta se employee.	R was bred and do	eveloped l ic. all righ	by plant breeders employe ts to any invention, discov	d by Syngenta Seeds,	Inc. By
PLEASE NOTE:					
Plant variety protection can only be afforded to the	owners (not license	es) who m	eet the following criteria:		
If the rights to the variety are owned by the origin national of a country which affords similar protect	ral breeder, that per tion to nationals of t	son must b	e a U.S. national, national of a the same genus and species.	a UPOV member country,	or
If the rights to the variety are owned by the comp nationals of a UPOV member country, or owned genus and species.	eany which employe by nationals of a co	ed the origin ountry which	al breeder(s), the company m affords similar protection to n	oust be U.S. based, owned nationals of the U.S. for the	l by e same
3. If the applicant is an owner who is not the original	I owner, both the o	riginal owne	r and the applicant must mee	t one of the above criteria	
The original breeder/owner may be the individual or Act for definitions.	company who dire	cted the fin	al breeding. See Section 41(a	a)(2) of the Plant Variety F	Protection
According to the Paperwork Reduction Act of 1995, an agency may number. The valid OMB control number for this information collection the time for reviewing the instructions, searching existing data source	r is libita-littin The time	formired to con	unata this information actiontion is com-		lid OMB control onse, including
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